

BRISTOL COUNTY WATER AUTHORITY

GIS COORDINATOR

Under direction, performs a variety of intermediate to complex duties in support of capital improvements and daily operations of the Bristol County Water Authority. Performs work directly and indirectly related to the planning, design, construction, operation, and maintenance of drinking water system facilities. Work includes development of engineering plans and distribution system mapping using ArcGIS software, integration with work order management and other BCWA software programs, preparation of construction details using CAD programs, and other work as needed. Responsibilities include mapping database maintenance and optimization, creating displays and maps, and conducting research and analysis with GIS and other data and records systems. This position serves as an interface between multiple departments responsible for various components of water system and supports activities including training and assisting staff, researching, and implementing new GIS technologies, and improving business processes.

The essential functions or duties listed below are intended only as illustrations of the various type of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related, or a logical assignment to the position.

- Creating and updating datasets within the BCWA Geographic Information System (GIS); maintain the distribution system GIS database (ArcGIS), including performing revisions, updates, and new installations into the GIS database.
- Creating ArcGIS map services and custom web applications to produce maps, presentations, reports and spreadsheets for internal and external customers.
- Implementing, managing, maintaining, and expanding the ArcIMS software, database, and related components.
- Maintain engineering department relational databases.
- Incorporate digital data layers as they relate to the BCWA's GIS including, but not limited to, sanitary sewer, storm sewer, gas, and parcel layer groups.
- Provides periodic one on one and classroom style training to GIS end users. Provide end-user support with software problems, software customization, and projects as needed.
- Coordinating with other Departments, IT staff, and vendors to solve problems.
- Collect, compile, analyze, and digitalize geospatial and tabular data to produce maps and related products.
- Ensuring that all of the daily GIS database entries are made timely, so that Operations Department employees have the most up-to-date information when working in the field; This will include working closely with the Operations Department Supervisors relating to the field work orders to confirm that the information documented is accurate for GIS entry.
- Researching, implementing, and integrating computer software to maintain an up-to-date digital mapping and database of the system, and to utilize this data to maintain and improve the water system.

- Performing data analysis and queries of BCWA data, to be used for reporting purposes by various departments. Supporting end-users of geospatial and mapping data for analysis and planning purposes.
- Maintaining distribution system hydraulic model mapping utilizing and integrated with GIS maps, SCADA system data, system drawings and as built;
- Assisting in the long-range planning of pipelines, pump stations, tanks, water treatment, and other water system facilities. This work may include the use of computer software to perform asset management, distribution routing analysis, etc.
- Prepare operational manuals and recommend procedures.
- Performing survey work in the field, such as as-built location or verification of utilities, assets and features using GPS survey equipment and software to collect and download digital data.
- Maintains standard construction details using CAD software.
- Performing other duties and tasks as determined to be in the best interest of the BCWA and customers serviced.
- Periodically update GIS through use of GPS data collection and conversion of GPS data into GIS format.
- Use of AutoCAD for viewing data and converting data into format compatible with GIS for the purpose of updating GIS.
- Interview, hire, train, and supervise GIS interns.
- Production of end of year written summary / annual report on GIS program.
- Update mapping on BCWA website as needed

Qualifications:

- A minimum of a Bachelor's Degree in engineering, Environmental Science, Geography, Planning, Computer Science or other related field and two years of GIS related experience, preferably with a water or wastewater utility.
- GISP, Graduate level GIS Certificate or ESRI Desktop Associate Certification desirable.
- Demonstrated experience and proficiency with ESRI family of products, including ArcGIS, ArcInfo, ArcView, ArcMapServer Geodatabases and SDE.
- Knowledge of GPS collection and conversion methods
- Knowledge of SQL, VBA, PHP, Java, and Javascript a plus
- Experience with relation database management systems such as SQL Server or MySQL a plus
- Familiarity with Computer Aided Drafting software and tools
- Possession of a valid Class C Rhode Island driver's license and a satisfactory driving record.

Abilities, Knowledge and Skills:

- Ability to learn and use engineering software such as asset management and routing programs.
- Must have the ability to understand user requests, interpret these requests and formulate responses that meet the users' needs.
- General understanding of water utility systems is helpful.
- Maintain detailed and accurate records. Strong analytical skills.
- Understand and carry out oral and written instructions.

- Gather, analyze, and evaluate technical information and make reasoned recommendations thereon.
- Communicate effectively and interact appropriately with others, both orally and in writing.
- Strong organizational skills with the ability to handle and prioritize multiple tasks simultaneously.
- Use a computer to perform various tasks such as spreadsheets, word processing, database applications; proficiency in Microsoft Office, including Word, Excel, and PowerPoint.
- Learn and use various computer software packages used in mapping, operations and planning of water distribution systems.
- Demonstrate ethical, professional conduct at all times.
- Present technical information to non-technical persons.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Ability to work independently with little direction when task requires it.
- Ability to organize data into systems with an understandable, accessible format.

Physical Demands:

The conditions described in this job description are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Office setting and limited field work.

- Must possess mobility to work in a standard office setting and use standard office equipment, including a computer and to operate a motor vehicle.
- The noise level in the work environment is usually moderate, consistent with a business office. The employee may be exposed to outdoor temperature, humidity, wetness and dust.

Physical:

- While performing the duties of this job, the employee is occasionally required to talk and hear, to use hands or fingers to handle or feel objects, tools, and controls, to stand, walk, sit for lengthy periods, and reach with hands and arms, grasp, climb and stoop.
- Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment, printers and plotters.
- The employee may occasionally be required to physically lift up to 25 pounds for files, computer printouts, supplies and materials.
- This position requires that the employee demonstrate adequate hearing and speech to converse in person, before groups and over the telephone, and vision to read printed materials and use a computer screen.

Salary and Benefits:

- Salary \$65,000-\$75,000, commensurate with qualifications.
- 457 Plan
- Health and Dental insurance
- Vision Insurance
- Employee assistance program
- Flexible spending account
- Life insurance
- Paid time off

Work hours shall be Monday through Friday, 40 hours per week.

Work to be performed at BCWA Administrative Offices, 450 Child Street, Warren, RI.

Please email resume to hr@bcwari.com.

Applications are due by June 17, 2022.

THIS IS NOT A REMOTE POSITION